

REMARKS

I. INTRODUCTION

Claims 1-49 are pending in this application. By this amendment, claims 1, 14, 28, 34, 38 and 43 have been amended to further distinguish over the references of record. No new matter has been introduced by this amendment. Claims 48 and 49 have been withdrawn from consideration by the Examiner. Upon issuance of a Notice of Allowance by the Examiner, Applicant will cancel claims 48-49.

II. CLAIM REJECTIONS

Claims 1-47 stand rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,317,599 to Rappaport *et al.* (hereinafter “the Rappaport patent”) in view of U.S. Patent No. 6,157,838 to Di Huo *et al.* (hereinafter “the Di Huo patent”). Applicant respectfully traverses the rejection.

In particular Applicant respectfully submits that the combination of applied references fails to disclose or suggest a tool for providing a site survey of a wireless network comprising a network server having a server application module to create and distribute data packets, a plurality of physical access points located in a network coverage area coupled to send and receive data packets from the server, a portable computer in wireless communication with the plurality of access points, the portable computer having a two-dimensional surface area map of the network coverage area on a data grid, and wherein the portable computer receives data packets sent by the network server and includes instructions that are adapted to compute at least

one of throughput and packet error rate at selected locations within the network coverage area and display the at least one of throughput and packet error rate on the two-dimensional surface area map to provide a site survey depicting a quality of wireless network coverage within the network coverage area, as recited in independent claim 1 and similarly recited in independent claims 14, 28, 34, 38 and 43.

In contrast to the claimed invention, the Rappaport patent describes a simulation system for planning a 3-dimensional wireless communications network. A software tool simulates wireless performance throughout the network based on known properties of wireless access points, known RF attenuation properties of building materials, and the building's physical dimensions and/or layout. A plurality of "watchpoints" are defined that provide textual and/or graphical feedback to a designer regarding the wireless system performance throughout the environment. However, a key difference between the system of the Rappaport patent and that of the claimed invention is that in the former, none of the performance data is based on actual measurements in a real network. Rather, they are based on predetermined attenuation and interference data. Actual performance may differ based on sources of interference not built into the model, furniture layout and materials, and other phenomena existing in the real world.

The Di Huo patent teaches a system for optimizing a wireless telephone network. Signal markers are placed in critical locations within the wireless telephone network. These markers collect data such as signal strength and amplitude from surrounding base stations, and amount of user demand for access to the network. This data is communicated by the various markers to the mobile switching center. The mobile switching center analyzes the data and, if the data indicates

unsatisfactory performance, determines new parameters for the base station. The new parameters are communicated by the switching center to each base stations and the base stations modify their performance parameters accordingly. The performance parameters may include information such as antenna tilt, antenna height, antenna azimuth, transmission power or transmission signal amplitude, and neighbor list.

In the Office Action, the Examiner asserts that by combining the teachings of the Di Huo patent with that of the Rappaport patent, the claimed invention is rendered obvious. Applicant strenuously disagrees with this assertion. As noted above, the system of the Rappaport patent is a modeling system based on purely theoretical performance data. Thus, in the context of the independent claims, the system of the Rappaport patent does not have a plurality of physical access points located in a network coverage area that send and receive packets from a server. The system of the Rappaport patent also does not have a portable computer/client in wireless communication with the plurality of access points that measures performance at points in the network and that provides a two-dimensional surface map depicting a quality of wireless network coverage in the network coverage area.

The Di Huo patent is relied upon by the Examiner to disclose monitoring actual (as opposed to theoretical) network traffic including data packets wherein the access points are coupled to send and receive data packets from the server. However, in the system of the Di Huo patent, various signal markers are placed at locations within the network. The actual wireless telephone base stations are therefore most closely analogous to the wireless access points of the claimed invention. However, these are not access points, that is users do not access the network

to send and receive data from these points. Rather, the base stations are used for this purpose. Also, with the Rappaport patent, the Di Huo patent fails to teach a portable computer/client in wireless communication with the plurality of access points that measures performance at points in the network and that provides a two-dimensional surface map depicting a quality of wireless network coverage in the network coverage area. Rather, Di Huo monitors activity at fixed locations deemed to be difficult or high demand areas and then if necessary alter the performance characteristics of the base stations serving those areas. There is no mobile client/computer in the Di Huo patent.

In addition to the above differences between the claimed invention and applied references, Applicant notes that the theoretical system of the Rappaport patent is fundamentally incompatible with the optimizing system of the Di Huo patent which optimizes system performance based on actual operating conditions such as user demand. It is inconceivable how the design tool of the Rappaport system could be modified to include these features. Moreover, to do so would be to completely eviscerate the substance of that system. The combination appears to have been made based on hindsight reconstruction in an attempt to bootstrap an otherwise implausible combination of references. Even if we assume *arguendo* that the seeming implausible combination of references is valid, the combinations still falls short of the claimed invention. As noted above, the combination does not suggest a portable computer/device/client that receive packets sent by the various access points and that analyzes the packets to determine a quality of signal strength at those points based on a measured packet error rate and throughput and that generates a map depicting quality of network coverage within a network coverage area, as

recited by each of the independent claims. Therefore, Applicant respectfully submits that independent claims 1, 14, 28, 34, 38 and 43 are patentable over the combination of applied references.

Similarly, the remaining dependent claims 2-13, 15-27, 29-33, 35-37, 39-42 and 44-47 are likewise patentable over the combination of applied references for at least the same reasons as the independent claims.

Accordingly, withdrawal of the rejection based on the combination of the Rappaport and Di Huo patents is respectfully requested.

III. CONCLUSION

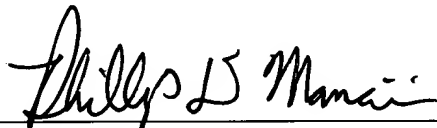
Applicant submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited. Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

It is respectfully submitted that no fee is required for consideration of this Response. However, in the event any fee is deemed necessary, the Commissioner is authorized to charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

Dated: June 13, 2006

By: _____



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